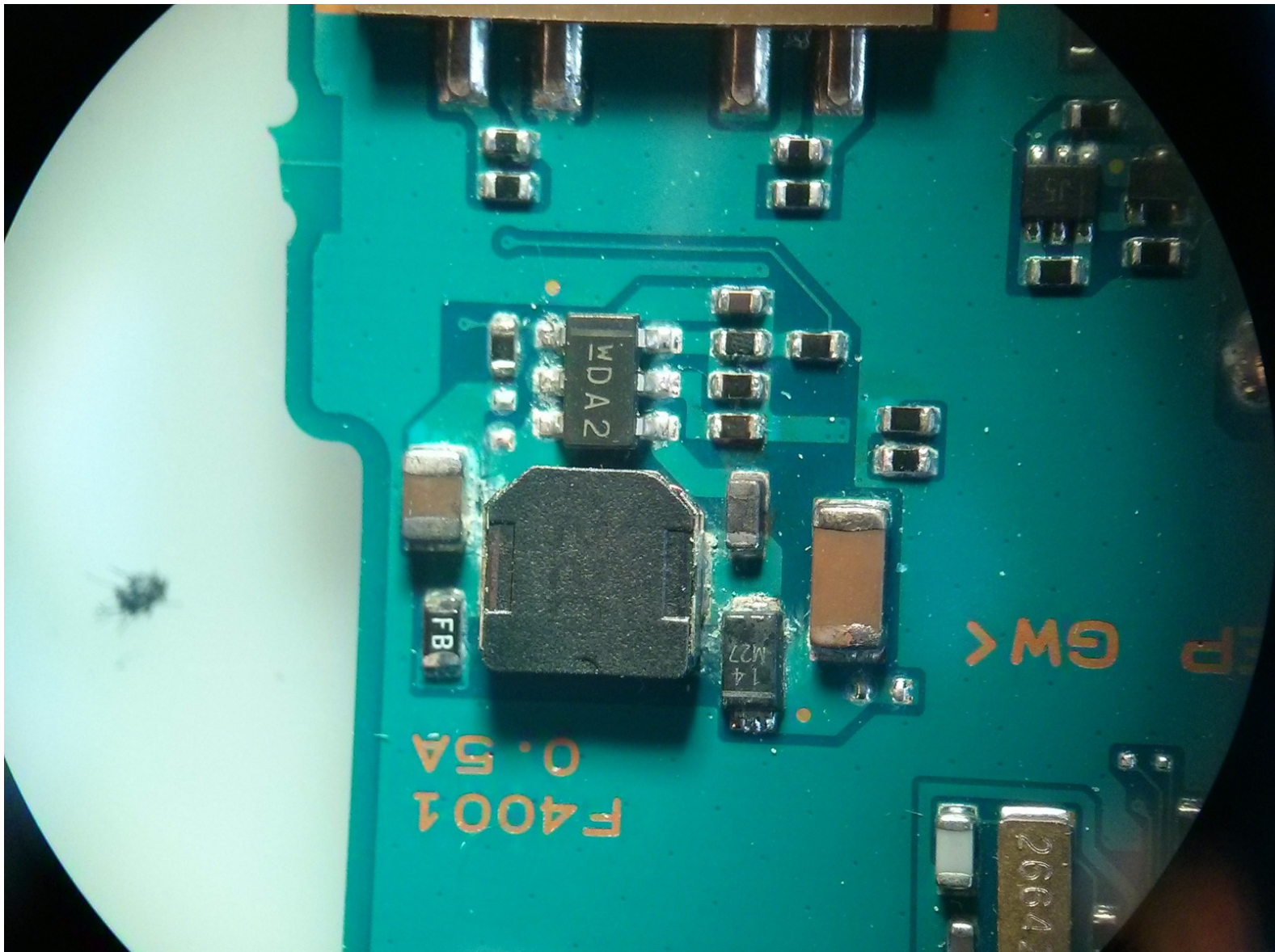




PSP E1000 LED Driver Circuit Component Replacement

Figuring out and repairing the LED driver circuit.

Written By: Steven



INTRODUCTION

My nephew brought me his PSP after watering it.

I found the PSP was working except the LCD backlight.

So I disassembled the device and searched for water marks. I found the marks directly on the LED driver circuit. After cleaning and checking the 0.5A fuse (was OK) I decided to find out the chip. It took me some time to find the correct chip. It was a TB62752AFUG LED driver. It's a step up converter with current output. It can deliver up to 40V.

Because I could not find out, which device was broken, I ordered all parts (except the resistors) and reworked them.

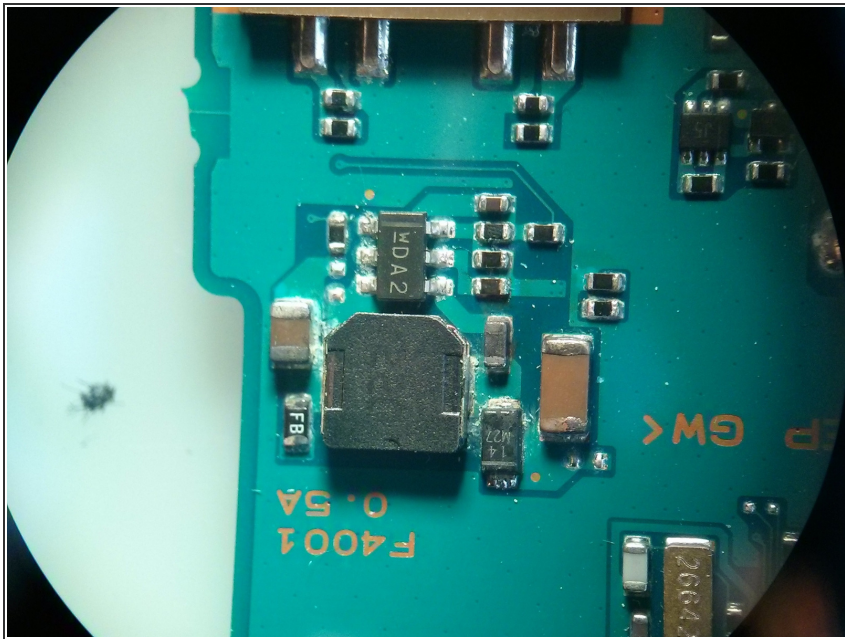
After reassembling the whole device, the backlight was working fine again and my nephew was happy.



PARTS:

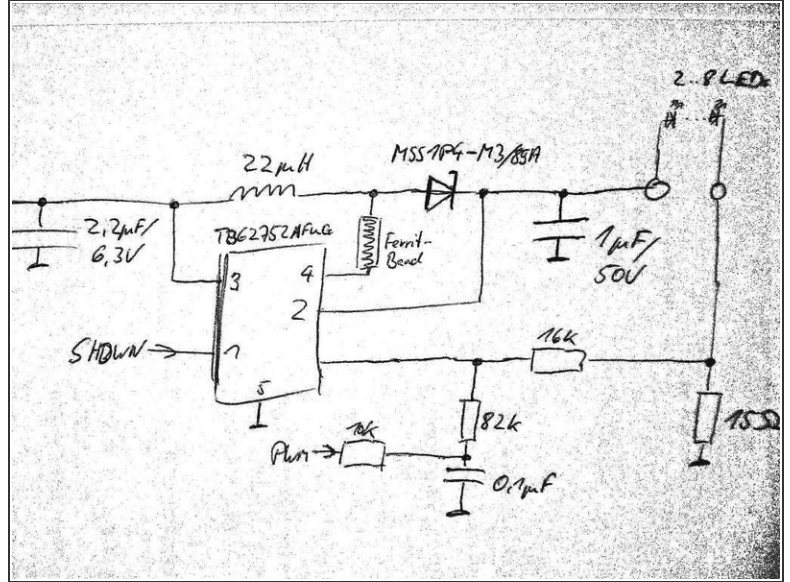
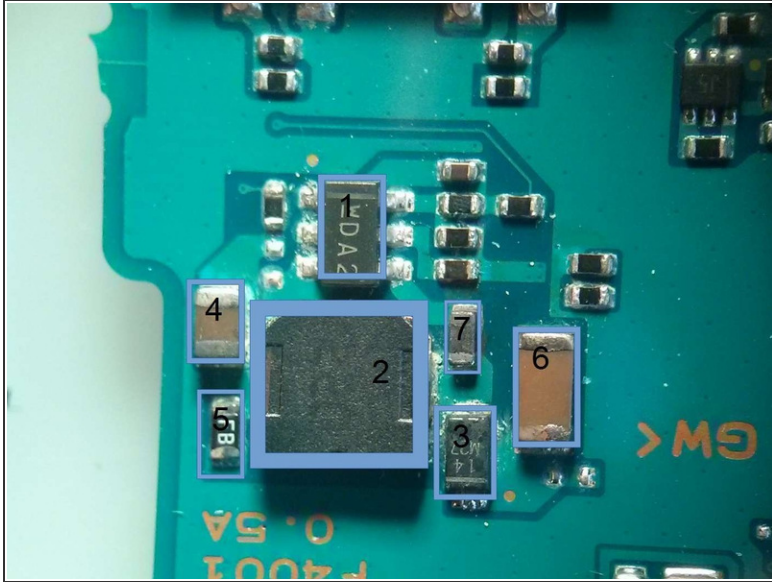
- [TB62752AFUG](#) (1)
 - [CDPH45D13FHF-220MC](#) (1)
 - [742792609](#) (1)
 - [MSS1P4-M3/89A](#) (1)
 - [2.2uF/6.3V/X5R/0805](#) (1)
 - [1.0uF/50VX5R/1206](#) (1)
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Step 1 — Backlight electronic after water damage



- this picture was made after cleaning

Step 2



- it took me some time to find the right chip:

- 1 - TB62752AFUG
- 2 - Inductor 22μH/0.66A
- 3 - MSS1P4-M3/89A
- 4 - 2.2μF / 6,3V
- 5 - Fuse 0.5A 0603
- 6 - 1.0μF / 50V
- 7 - Ferrite bead 300Ω/3A

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